

1 AGCTTTATAA CCATGTGATC CCATCTTATG GTTTCATCC ATGCACAGGA
 51 GGAAAATTGT GGGCAGGAAG TTTCCAAAGG GAAAATTAT AGATTGGTAG
 101 TTAATGAAAT ACAGTTTTC TCCTTGGCAA ATTTAATTTA CTAGCTTCAC
 151 TGTATAGGAA AAAGCAGGAA AAAAATTAAA ACCAACTCAC CTCCAAACCT
 201 GTTTTGAGCT TTTACTTGTC TGCCCAATTG ATAGTTTCTA CTCTCTGCTT
 251 TTGATGAAAA TATTTTTTAT TATTTTAATG TAACTTCTGA AAATAAATT
 301 ATCTAGAAGC AAATAAAAAG ATATTGCTTT TATAGTTCCC AGAAGGAAAA
 351 AACAAACACT AGGAAAGTTC TATCTATCAG ATGGGGGAGA TGTGATGGAG
 401 GCAGTGATAT TTGAGCTGAG CTTTGAACAA TGAACAGGAG TCTACCAAGC
 451 GAGAGGCTAG CGGGTGGCCC TCAAGATAAA ACAACAGCAT GTACAAGGC
 501 ATGGAGACAT ACACATCTTG ACTCTCCAG GAATGGTGGG AACGCTGGTG
 551 GAGCTAGAAT GTAGGTACAT AGCATAAAGT GGCAGACGGG AAGCCTTTGG
 601 AAATCTTATT ACATAGGACC CTGGATGCCA TTCCAATGAC TTGGAATTTT
 651 CTGTAGGCTG CCAGCGAAAT TTCCAAGCGT GATAGAGTCA TGTCTATCTA
 701 TGCACTTCAG AAAGACAACC TCAGGGTTAA TGAAGAAAA GCATTGGAAT
 751 ATAAGAAACT GGTGACCAGA GTGATCAATT GCATGACTGT TGTGAAAGTC
 801 CAGGTGAGGG GAGCTGTGGG CAAGGTCAGA GTTGAGAGGC ATTTACAGAGA
 851 TAAATGACA GTAACAAAGT AGATGTCAGG CTGAGAAGAA AGGGCTGTAC
 901 CAGATATATG GTGCTATCAT TAAGTGAGCT CAACATTGCA GAAAAGGGGT
 951 AGSTTTGGTG GGAGTTGCTC ACAAACATG TTTAGTCTAA GCAAACCAT
 1001 TGCCATGGGC TCAGATAAAA GTTAAGAAGT GGAACCAATT CCTACATTCC
 1051 TATAGGAGCT GCTATCTGGA AGGCCTAGTA TACACGTGGC TTTTCAGCTG
 1101 TGATTTTGTT TGATTTTAGS GATTATCTT TTTCTGAATC TGAGCAATGT

FIG. 1

1151 TAGCGTGTA AATACTACA CCCACAGCTT TGACTGGGTG AGAAGTTATC
 1201 ATAAATCATA TTGAGTTTGT TGTGATACCT TCAGCTTCAA CAAGTGATGA
 1251 GTCAGGTCAA CTCCATGTGA AAGTTCCTTG CTAAGCATGC AGATATTCTG
 1301 AAAGGTTTCC TGGTACACTG GCTCATGGCA CAGATAGGAG AAATTGAGGA
 1351 AGGTAAGTCT TTGACCCAC CTGATAACAC CTAGTTTGAG TCAACCTGCT
 1401 TAAGTACAAA TATGAGAAGG CTTCTCATTC AGGTCCATGC TTGCCTACTC
 1451 CTCTGTCCAC TGCTTTCGTG AAGACAAGAT GAAGTTTACA GTGAGTAGAT
 1501 TTTTCCTTTT GAATTTACCA CCAAATGATT GGAGACTGTC AATATTCTGA
 1551 GATTTAGGAG GTTTGCTTCT TATGGCCCCA TCATGGAAAG TTTGTTTTAA
 1601 AAAAATTCTC TCTTCAAACA CATGGACACA GAGAGGGGAA CAACACACAC
 1651 CAGGTCCTGT TGGGGGGTGG AGAGTGAGGG GAGGGAACCT AGAGGACAGG
 1701 TCAATAGGGG CAGCAARCCA CCATGGCACA CATATACCTA TGTAACAAC
 1751 CTGCACGTTT TGCACATGTA TCCCTTTTTT TTAGAAGAAG AAATAATGAA
 1801 AAAAAACCTT TTTTCTATTT ATATAATCAT GGCATTTATA AGCATCTCTA
 1851 TAGAGAAGGA TAATTGTGCT GAGATTAGAC AGCTGTCTGA GCACCTCACA
 1901 CTGACCTATT TTTAACAAAA TGACTTTCCA CATCACCTGA TTTGGCTCC
 1951 ATGCRGGGTA AGCAGTTCCT AAGCCCTAGA AAGTGCCGAT CATCCCTCAT
 2001 TCTTGAATTC CTCCTTTTAT TTACCAAAAT TCCTGAGCAT GTTCAGGAAA
 2051 GATGAAAAGC TTATTATCAA AATAAGTGGC TGAGATAGAC TTCTTGTGAC
 2101 ATTTGTTACA GTAAAATGGS TCTCCAAGAA AGAARGATTT GCCTTGGGCT
 2151 CTAGCATGGC CATTTATTTA AGAAAGCATC TGAARCATGA AGCTACCACA
 2201 GCATCTCTCC TGTGGTTCCA GACGGAAGCC TGAGAGTCTA GGAGGAGGTG
 2251 GACCGAGAAA CCCTGCCAAA GTAACAGTGA GTGCCGGGTT TCTCACAACA
 2301 CGATGCAAGG GGGCTAGAAT CAGATGACTA TTTTCATGTT TCAACATACT

FIG. 1 Cont.

2351 ACACACTGGA AAACGTTACG GCAGACTCTA CTTTATAATG GGGTGCAAA

2401 TGTAAATGA CTACTAGAAC TAGGTCCCTCT TAATAGCAGC AAAGTTTAAA

2451 AGGGTCAGAG GGAGCTCCAG ACACAGGTTA GATTTGATTT CTCTCCTAGT

2501 TCTGCTGTGA ACAAGAGGTA TAAGTTTGGC CAACTCACTT AACCCCTGAA

2551 GCTCASTTAC CTTATCTGTA AAATGATTGC ATTGTACTAG GTGTCTCTCTA

2601 AAATTTCTTC TACCTCTGAC TTTTTAGGAG ACTAATTTTT AACTCCTTTT

2651 TAAGCTATTG GGAGAAAAAT TTAATTTTTT TTCAAAAAGT ACCTTGAATC

2701 TCTAGAGCAG TTCTCAAAC TATTTTGTCC CAGGCAAAGG AAATGAGACT

2751 AGGTACCCAG AATGAGGCAC CCTGCATAAA GCTCTGTGCT CTGAAAACCA

2801 ATGTCAGGGA CCCTGTGATA AATAATTAAA CCAAGTATCC TGGGACACTG

2851 CTAGTGACAT CGCCTCTGCT GATCACTCTT GCCAGCGAGA CACTCTATAC

2901 TTGCTTTCTC ATCATTGGCA TCCAACTGC CTACTAATCC ATTGCTTTGG

2951 AAAGTTTTTT TTAATAAAAA GATTATTCTT ATTAGGAGGA AAACATCCCA

3001 TGTTAAATAG GAAAATTAAC TGAATCATT TTCAGATGTG ATTTTTAGCA

3051 CTTATAGCCA TTTCAAACCA TGGTATTCAT TTATACTATG CTAITTTATTG

3101 TAAAACCTCT TTTTTTTTCC AAGGAAAATA AGATAGTTTG CTTTATTTTA

3151 AAACAGTAAC TTCTTTATAT TGGGGCACTG ACCAAAATTC AATACTGGTA

3201 CAAATATGTT ACCTAGGGGG TCAAAATATG TGCCAGGTGA ATTTTCTGAA

3251 TTCTCTCTAA GAGAGAATTT TAAACCTTAT AAAACAATTA GAAACAAGTG

3301 AGTGAGAGGT GAGCATCAAC AACCTGTGTA ACATAAGCCA CAGTACAAAT

3351 TTAAGCTGAA TAACCAAGCC ATGTCAGTTA TCCCAAATCA TTTTGTGTTA

3401 TATTTAGGAG GATACACATA TTTTCAATAA CTTAAAAGTG AATCTTTACT

3451 CCTATCTCTT AATACTCGAA GAAGTATAAC TTTCTCTTT TACTAGATTT

3501 AAATAATCCA AATATCTACT CAAGGTAGGA TGCTGTCATT AACTATAGCT

FIG. 1 Cont.

3551 GAGTTTATCC AAAATAGAAA AATCATGAAG ATTTATAAAG CATTTTAAAA

3601 ATAATCATTT ATAGCAAGTC CTTGAAAGCT CTAAATAAGA AAGGCAGTTC

3651 TCTACTTTCT AATAACACCT ATGGTTTATA TTACATAATA TAATTCAACA

3701 AAACAGCATT CTGACCAATG ATAATTTATA GGAAATTCAT TTGCCAAGTA

3751 TAGTTTTTAT TATAAAGTTA ATATTTTGAC CAATCTTAAA AATTTTTAAA

3801 CTCTATTCTG ACATTTCCAG AAGTATTATC TTAGCAAGTC ATCTTTATGA

3851 TACCACCTAT TAAACTGAAG AGAAACAAGA TGGTACATTC TGGGTTTAC

3901 TTTAAAAGGG ATTTGATICA ATAATTGAT TTATCACTAC TTGAAAATTA

3951 CATTTTCTTC CTCAGACTGG ATGGCAATGA GATGAAAGCA GCTTCTCTGG

4001 CTCTCAACTT CCCTTCTTCA TCAATTTTTTC CAGCGTTTCA TAAGGCCTAC

4051 ACTAAAAATT CTAAACTAT ATATCACATT AATATAATTA CTTATAATTA

4101 ATCAGCAATT TCACATTATC GTTAAAACCT TTATGGTTAA AAAATGCAAG

4151 GTAAGAGAAG AAAAAACAC ATTGAAC TAGTGAACAC ATTGGTAAAA

4201 TTAGTGAATA CTTTTCATAA GCTTGGATAG AGGAAGAAAG AAGACATCAT

4251 TTTGCCATGT AACAGGAGAC CAATGTTATT TGTGATTTC AATTGTCCTT

4301 GCTGGACTTC TTGGAGCTT TCTAGCTCCT GCCCTAGCTA ACTATGTAAG

4351 TCTCACCTTT TCAAGTTTGC TACCAAAATG CATTTGCAAG GAAATGTGAT

4401 ATTAAATCAC TCTCAATCTC TTATAAACTT CAGAATATCA ACGTCAATGA

4451 TGACAACAAC AATGCTGGAA GTGGGCAGCA GTCAGTGAGT GTCAACAATG

4501 AACACAATGT GGCCAATGTT GACAATAACA ACGGATGGGA CTCCTGGAAT

4551 TCCATCTGGG ATTATGAAA TGTAGGTAGT CAACGTGCAA TTTTCACTTT

4601 ATIGTTTAAA AATACGACTT CTTTTTAAAC AAAAATGTGC ATGTTAACCA

4651 TAAAGAAATT AAAAAAAT TCTAATTACA CATAGCATAC AGTTATAAGT

FIG. 1 Cont.

4701 AAAGGTGACC ATTTTGCTCA TCCGATTTTG TTCCTAGAG ATACTACTG

4751 TTAATAAGTG TTGCATGATC AGTTAAAATT CAAACCAACA AACACTATGT

4801 TCAAGGGATT GTGGGTATAT ACAACAAATA TGAACATCCT TTGCGCTTGC

4851 CTGCAGATAC CCTCAATAAT GCTGAAAGAC TTATACAACA TTACTGCTTC

4901 CAAAGCTTAG ACTATCTCAC TTTGTTTTCA AAGGAGTTT TACGACCTTC

4951 TAAAGAGATT GAAATTGACA TTTCACCTAA RACTCGGGAA ATGTAATGA

5001 CAATATTAAT TGTAAGAGA GGAAGAAGA AAGAAAGAAG GAAGGAAAGA

5051 AAGAAAGAAG GAAGGAAGGA AAGAAGAAA GAAAGAAGA AAGAGAGAGA

5101 AAGAAAGAAA AAGAAAAAG AGAGAAAGAG AGAAGGAAAG AAAGAGAGAA

5151 GGAAAGGAAA AGAGAAGCAA AGAAGAGAG GAGCAAGAA AGGAACACTT

5201 AGCACTAGTT GGGAGACCCA ACTCTGGAAT TATCAGCTAT ATATTTAACA

5251 AACGTTATAC TTTTAAATAG CAAACTCTTT ATTGTTTCAA TTTTATCTGG

5301 TCAATTGGAA AAATAATTTT TGCTTTAICT GTCTCCTGA AATGTAGGA

5351 TCAAAGGAGA CTAACACATG ATAGCTTTTA AAGTCTATTT CAGTAAACAA

5401 GACTTATATA GAGGGGTTTT TATCATGCTG GAACCTGGAA ATAAAGCAAA

5451 CCAGTTAGAT GCTCAGTCTC TGCCCTCACA GAATTGCAGT CTGTCGCCAC

5501 AAATGTCAGC AATAGATATG ATTGCCAAGC AGTGCCCAT CCAGTGCTCT

5551 TATCCCAGCT CATCACGATC TTGGAGTTC CATTTCCTC TGCAGGTGGA

5601 ACTGACCTCT GATAAGAAAA GCTCCTCGA GAACACATGC CTCACTATTT

5651 GGCATCTACT TTAACAGGGC TTTGCTGCAA CCAGACTCTT TCAAAGAAG

5701 ACATGCATTG TGCACAAAT GAACAAGGAA GTCATGCCCT CCATTCAATC

5751 CCTTGATGCA CTGGTCRAAG AAAAGAAGGT AAAAATAAAA GGCTTTTTAT

5801 TTTTGGTGAG GGGAGAGGTT TTACATCCTT CAGTAAATAA CGAGAAGATC

5851 ACAGTCATTCT CCTCTTGACT ACAGTATGTT GTAGTGTGCA GCACAAAGGG

FIG. 1 Cont.

5901 GGAAGTTATT GGTGATTGCC TGAGGGAAGG CAACTTCTGC CACATCAAAT
5951 GCTGTGGCTC ACACCTACCT CTACAACCGC TGAGCAAAGC ACTTGAAACC
6001 TTGACTGTTA GAGGAGCAAA GCTCTGGTCA CACCAATAGG AGCCTCAGTA
6051 CTTTGCCAAG GACATTTTTC TGCAAGAGTT AGTTAGGGTT ATTAGATTTA
6101 GCAATGAAA ATAGAAGATA TCCAGTTAGG TTGCAATTT AGTAAAGCAG
6151 CAGGTCCTTT TAGTATAATA TATCCTATGC AATATTTGGG ATATACTAAA
6201 AAAAGATCCA TTGTTATCTG AAATTCAAAT GTAACGGGT ATTGTATATT
6251 TTGCTGGCC ATACTAATCC AGGTGAGTGG AAAGAAGAGA TCCATAATGT
6301 TTTAAATAT TTGCCTGAGT TCATATTCCT ATAACGTATA AATGAGTACC
6351 TTTCATTGAC AAGGTAGAGA AAATAAATAA ACTGCATTCT CAGAAGATGA
6401 TTATTACATA GTCTAATCCA AGGAATCTAT GATGACCAA TGAGGTCCAA
6451 GTTGCGAAT AAATTAAGCC TCAGACTTCT GTGTTTATGA GAAGCTGAGG
6501 TTTCAAACCA GGTAAATCCC TTAGGACACT TAGAAATGCT AAGATATACA
6551 GAATAAGCTA GAAATGGCTC TTCTTCATCT TGATTATGGA AAAATTAGC
6601 TGAGCAACAC TCACTGTTGG CCTCGTATAC CCCTCAAGTC AACAAACCAC
6651 TGGGCTTGGC ATTCATTCTC TCCCATCTT CCTTCTTACC TCTCTTTTCC
6701 ACACTCAGCT TCAGGGTAAG GGACCAGGAG GACCACCTCC CAAGGGCCTG
6751 ATGTACTCAG TCAACCCAAA CAAAGTCGAT GACCTGAGCA AGTTGCGAAA
6801 AAACATTGCA AACATGTGTC GTGGGATTCC AACATACATG GCTGAGGAGA
6851 TGCAAGGTGA GTAGCATCCC TACTGTGCAC CCCAAGTAG TGCTGTTGGG
6901 ATTGTCAGAC TATCCTCGCG CGTGTCATA GTGGGCACCA GTGATGCAGG
6951 GATGGTCATC AAGGCCAACA TTGTGCGAGT GCTTGCTCTG TGCCAGGTAC
7001 TGTCTATGT GCTTTAAGTG TGTTAACTCG GTTCTTCACA GCAATCTTAT
7051 AGGTTCTATT TTAATCCTAC TTATGGATG AGGAAACTGA GGTACAGAGA

FIG. 1 Cont.

7101 GGTACAAAA TCCTTGCCTG GGTCATTCC AAGCATTTTG GCTGTGGATT

7151 CTGTGCTCCTT AAATATTATG GAACACTGCC TTTTAAGTGT GAATCAAGAG

7201 TAGACTCAAG TCATATTCAA AAGAATGCAT GAATGGCTAA ATGAAAGAAG

7251 AATGCTAATA GAATCTATTA ACTTTCATATA GCTCAGACAA TCACTTAATT

7301 TCTGGACATT CAAAGAACAG CTGCACACAA ACAAAGTGTC TACCTAGGGA

7351 CCTAACTTAA TGGCAATTTT CCAGATCTCT GAATTGATTG ATTCATCAC

7401 AACCAAGTAGA TAAACCTTGA CATTAGCACA TAGCTAGTTT GGAAACCCCT

7451 ACTCCCCCAA TCCCCTCCAA GAAAAGAGTC CTTAAATAGA CATTAATATA

7501 GGCTTCTTCT TTTCTCTTTA TTAGAGGCAA GCCTGTTTTT TTA CT CAGGA

7551 ACGTGCTACA CGACCACTGT ACTATGGATT GTGGACATTT CCTTCTGTGG

7601 AGACACGGTG GAGAACTAAA CAATTTTTTA AAGCCACTAT GGATTTAGTC

7651 ATCTGAATAT GCTGTGCAGA AAAAATATGG GCTCCAGTGG TTTTACCAT

7701 GTCATTCTGA AATTTTTCTC TACTAGTTAT GTTTGATTC TTTAAGTTTC

7751 AATAAAATCA TTTAGCATTG AATTCAGTGT ATACTCACAT TTCTTACAAT

7801 TTCTTATGAC TTGGAATGCA CAGGATCAAA AATGCAATGT GGTGGTGGCA

7851 AGTTGTTGAA GTGCATTAGA CTCAACTGCT AGCCTATATT CAAGACCTGT

7901 CTCCTGTAAA GAACCCCTTC AGGTGCTTCA GACACCACTA ACCACAACCC

7951 TGGGAATGGT TCCAATACTC TCCTACTCCT CTGTCCACTG CTTAA

FIG. 1 Cont.

1 CATGCTTGCC TACTCCTCTG TCCACTGCCT TCGTGAAGAC AAGATGAAGT
 51 TCACAATTGT CTTTGCTGGA CTTCTTGGAG TCTTCTAGC TCTGCGCTA
 101 GCTAACTATA ATATCAACGT CAATGATGAC AACACAATG CTGGAAGTGG
 151 GCAGCAGTCA GTGAGTGTC ACAATGAACA CAATGTGGCC AATGTTGACA
 201 ATAACAACGG ATGGGACTCC TGGAAATCCA TCTGGGATTA TGGAAATGGC
 251 TTTGCTGCAA CCAGACTCTT TCAAAGAAG ACATGCATTG TGCACAAAT
 301 GAACAAGGAA GTCATGCCCT CCATTCAATC CCTTGATGCA CTGGTCAAGG
 351 AAAAGAAGCT TCAGGGTAAG GGACCAGGAG GACCACCTCC CAAGGGCCTG
 401 ATGTAICTAG TCAACCCRAA CAAAGTCGAT GACCTGAGCA AGTTGGGAAA
 451 AACATTGCA AACATGTGTC GTGGGATTCC AACATACATG GCTGAGGAGA
 501 TGCAAGAGSC AAGCCTGTTT TTTTACTCAG GAACGTGCTA CACGACCAGT
 551 GTACTATGGA TTGTGGACAT TTCCTTCTGT GGAGACACGG TGGAGAACTA
 601 AACAAATTTT TAAAGCCACT ATGGATTTAG TCATCTGAAT ATGCTGTGCA
 651 GAAAAAATAT GGGCTCCAGT GGTTTTACC ATGTCATTCT GAAATTTTTC
 701 TCTACTAGTT ATGTTTGATT TCTTTAAGTT TCAATAAAAT CATTTAGCAT
 751 TG

FIG. 2

1	MKFTIVFAGLLGVFLAPALANYNIDVNDNNNAGSGQQSVSVNNEHNVAN	50
51	VDNNNGWDSWNSIWDYGNNGFAATRLFQKKTCIVHKMKKEVMPSIQSLDAL	100
101	VKEKKLQGGKGGPPPKGLMYSVNPKNVDDLKFKGKNIANMCRGIPTYMA	150
151	EEMQEASLFFYSGTCYTTSVLWIVDISFCGDTVEN	185

FIG. 3

1 GAATTCAAAC AGCAGGCCAT CTTTCACCAG CACTATCCGA ATCTAGCCAT
 51 ACCAGCATTC TAGAAGAGAT GCAGGCAGTG AGCTAAGCAT CAGACCCCTG
 101 CAGCCCTGTA AGCTCCAGAC CATGGAGAAG AGGAAGGTTG TGGGTTCAG
 151 GAGCTTTTCA GAGTGGAAAT CTGTGGATCA GTGATTTATA AAACACAGTT
 201 TCCCCCTTTA TTAGATTGTA ACCACCAGCT TCAGTTGTAG AAGAGAACAG
 251 GTTAAAAAAT AATAAGTGTC AGTCAGTTCT CCTTCAAAC TATTTTAAAC
 301 GTTTACTTAT TTTGCCAAGT GACAGTCTCT GCTTCCTCTC CTAGGAGAAG
 351 TCTTCCCTTA TTTTAATATA ATATTTGAAA GTTTTCATTA TCTAGAGCAG
 401 TGGTTCTCAT CCTGTGGGCC ATGAGCCCTT TGGGGGGGTT GAACGACCCT
 451 TTCACAGGGG TCACATATCA GATATCTGCG ATCTTAGCTA TTTACATTAT
 501 GATTCATAC AGTAGCAAAA TTAGTTAGGA AGTAGGAACA AAATAACGTT
 551 ATGTTTGTGG TCACCCTAT GTTAGAGGGT CCGCAGCATT CAGAGGGTTG
 601 AGAACTGTTG TTCTAGAGGC AAATAAGAAG ACAGAGTTCC TTGATAGGGC
 651 CCAGAGGCAG TGAAAGAAGT TTCCACGTAG AAAGTGAAGA AGGTCTGGTG
 701 TCCGAAGCAG TGAGGAACTT AAAAAAGAA AACCAAAAC ATTGCCAACT
 751 AACAGTCCAG GAGAAGAGCG GGGCATGAAA GGCTGAGTTC CCATGGGATG
 801 CCTTGAATGG AATCAGAGTG TGGGAAAATT GGTGTGGCTG GAAGGCAGGT
 851 GCCGGGCATC TCAGACGCTG GTAGCTGGGG AAACAGGAAA CCCCTTTAGG
 901 ATCCCAAGAT GCCATTCCAA TGAGCTTGAG ATTTTCTCA TGGACTGCCA
 951 GTGAATGTTT CTACGCTCCG GAAATTAATG TTTACTTATT TTCCATATTC
 1001 TAGGGGAGAA CCCTGGGAAA AATGGAGGAC ATTCATTGAA ATATCTGAGT
 1051 CCTGGGATAA GGCAGGCTTG GTCCTACAAC TCTGGTAAAA GTCCATCAGG
 1101 AAGTGCCTTG ACCAAGGCTG GAGTGGAGAG CTGTTGGTGA GATGTAAGGG

FIG. 4

1151 CAAGGTTTAG TTGCTAGATA TGTAGATGGC AAGATGGTGC TGCCAACAGC
 1201 CCCCAGAGCT CTAACCACT GAGAAACCCA GGAATGAATG ATGGGAGATG
 1251 GCTTTGGTGC CAGCTGCTAG TGACATGGCT GGAAGCTGC ACTGGCTCG
 1301 AGGCCAGACA ATTCCTCAAG GAAACATCTG GCCAGGGTGC AAGGGCCAGT
 1351 TTCTTCTCTT GGAGTTCCTT TCACAGCTAA GAACATCATC CCCCAACCAC
 1401 TGSTTTTGT AAAAAGTTT CAGTATGACT TGAGCATGGT CAAGAAGCAT
 1451 AGAGAGGGGG AATAAGGGT GGAAGGAGCT GGAGAAAGCT TACAATAGGA
 1501 CTGGGTAAAG GGAAGGAGAA GAAACATTG CCGATTCCC ATAGGAGCCA
 1551 GTACCAGGAA GGGCAGGTGT ACACACAGAT CTCATCTAAG GCCATGTTTG
 1601 GTTTAGGGAT TACTCTTCTC CCGAATCTGA GCAGCAGCAA TACGTAAAAAT
 1651 ACCCACACCC ATGGCTTCCA TATTCCAGAA CTTATCACAA ACCGTGTAGA
 1701 GTTTACTGAG ATACCTTCGT CAGAGGATGA GTCAGAGGCC TCCTGCCTAA
 1751 GGGCCCTACT GAGCAGGCAG CTAAGGCTT CCGGGCTCT GCAGCTCCAC
 1801 AGATACAGGA GAGGGAAGCA GATAAGCGT GGACTCCACC TGAGCACACC
 1851 TAGCTTGAGC AAAGCTGGTC AGGTACAAAT AGCAGAGGGC TGAATGTCTG
 1901 TGAGCACGCC GCCTGATCCT CTGCTCCACC ACATCCTGC CGCCATGAAG
 1951 CTCACAGTAA GTCAGATCTT CTTTCAATG CAGCACCATA CAACATTAAT
 2001 AGTCAGGGGT GAGGGGGTCT GACTCTTACG GCACGTGTAC CATAGTGGAA
 2051 ATATTCTCCT TTCTTTTCAT GGAATCATGG TGTTTACAAG CATGTCCATA
 2101 GAGAAGAAGA ATTGCCCCGG AAGAGCTGT CACAGGCTGA ATACTGTAGA
 2151 ATTGTCCTTC ACACCATCTG TTCCAAGGTT CTACTTAAGA CGAGAGTCT
 2201 CTGGGCTCCA GAAAGAGTCT TTCTTAGCCT TGATCTCTTT CTTATTTCTG
 2251 ATTTCTCCTT TCTTATCCAT GATTTCACCT TTTACCAGTT CTGGGCATGT

FIG. 4 Cont.

2301 TCCGTCAGAG CTGGAAGATC ACTGTTGICA AAACAGTCT TCAACACTCT

2351 TGGCTGTTAA CATGAAAACA ACGGTCCTTG GGCCTGTGC AAGCATTTCT

2401 TGGAGAAAGT CTCTGGGGAT GAAGCTATCT CAGTTCCCC ACTGAAGTCC

2451 TAGGATACAG AGGCTCAAAC AGAGTGCACA TATTCAATTT CAGCATACTC

2501 TATTGGCGCT GCTTTATGAA TCATATGAAT TTATGGAATT GGAAATGTAA

2551 ACTATGACCA AGAAGCGTCC ACCTCAGAAC AGGTTGGGTG GGGAACCCA

2601 AGCACAGGCC AGAGGGCTGC GTTCTCTTC TAGTTCTGTC TAGAGGAGTG

2651 GTTCTCGACC TTCTAATGC TGTGACCCTT TAATACAGTT CCTCACGTTG

2701 TCGTGACTCC CAGCCATAAA ATTACTTTCA TTGCTACTGC ATAAGTGTAA

2751 TTTTGCTACC ATTATGAGTT GTAATGTAAA TATCTGATAT GCAAGATACC

2801 AGATAACCTA AGAAACGTT GTTTGACCTT TAAAGGGTGC ACAACCCACA

2851 GGTGAGAAC TACTGGTCTA GGGTCCTTTA CAGTCCTTTA GCTGCCTCAT

2901 TTACAGGAGA TAACATCATG CTCAAAACT CCOTCCACAT TTGGCTTTTT

2951 GGGTTGTTTT GTTTGTTTT TCAAGACAGG GTTCTCTGT GTAGCCCTGG

3001 CTGTCTGGA ACTCACCTT GTAGACCAGG CTGGCCTCGA ACTCAGAAAT

3051 CCGCCTGCTT CTGCCCTCTG AGCGCTGGGA TTAAAGGCGT GCGCCACCAT

3101 GTCTGGCTCA CATCTGGCTT TTTAAGAGAC CGATTTTAAT TTCTTGCAAT

3151 GAAATAAAT ATAGTAGAAA TGCTTAACCT ACTAAGACAA TAAAAACAGG

3201 ATTCTTCTG CTAGGAAGAA CAGCTCCAG ACTAAGGAAA AAAACCTTTT

3251 CAGGGCTTTC ATTACACTGT GCCATGCACT AATTTTATGT TTTCTTCATC

3301 AGTTTTAGT GTCTGAAAT CAGTGTCAAA ATTCTAAGAC TACATATGAA

FIG. 4 Cont.

3351 TATCATTACA GTAACCTCAGC AATTCTATGT TACCAGTAAG TTTTCTGTGA
 3401 GTTTAAAAAA AAGGTGGAAG AAGAAAGCAC AGATAGTTTA GCACATGGGT
 3451 AAAATCAGTA ACTATTCTG ATGAGCTTGG TGAAGATGCT GTAAACCATG
 3501 CGACCACCAG TCCTGTTCTC TGTGCTTTCA GATGTTTCGTC GTGGGCTGTC
 3551 TTGGCCTCCT TGCAGCTCCT GGTTTTGCTT ACGTAAGTCT CATTTTCTGC
 3601 AAGTTCATTG TCAAACTGC ATTTACAGTG AAATGTGATC TTAAGTCACC
 3651 CTCTGCTTCT TATGAACATT AGACGGTCAA CATCAATGGT AATGATGGCA
 3701 ATGTAGACGG AAGTGGACAG CATTGCGTGA GCATCAATGG TGTGCACAAC
 3751 GTGGCCAATA TCGACAACAA TAACGGCTGG GACTCCTGGA ATAGCCTCTG
 3801 GGAATATGAA AACGTATGTA ATGGACACAC AGGGTAAAGA TATGGTGTAG
 3851 CCACCACCCA TTTAAATTC TGAGGTGAAT TCTAGCTGTT CATGAACATT
 3901 AAAAGTACC AGTAAAGTG CCCATCCAC TCAAAACAAT TTTACTTTTT
 3951 TGCATATAAT TATTGCTAAT AAGTATTACA CAATAGGTCG AAATTCAAAG
 4001 GGATCAATAG TAAGGATAAA AACTATGTAC AAAGACAAAC ACAGCATCCT
 4051 TTGGTCTTCC CTGCAGAGAG TCTCCATGAT GTTAAAGGTC CAATGTTTTA
 4101 TGGAGGCTGA ATGAAATACG AATGCCTCTG TGATGGAAAA GGCACAACAT
 4151 CTTATGGAGA ATGAGTGAAG TATGAATGCT ATTAGTTGTA AGAGAAGGCG
 4201 ATGCAAAGCA ACACCTGGCA CCACCTGCCA ATTACTACTT TCCTATTATA
 4251 ATGTAGTTTA AAAAGCAAAG CCTGTCTTCC CTGCCCTCCTG GAAACACTGC
 4301 GGATGGAGGT AGACCAAGGT ATGACAGCCT TTAAAAGTTT GTCAGCAAAA
 4351 CACTCCCCCA TACACACATA CACACACCTT CCTACTACAC TGGAACTGAA

FIG. 4 Cont.

4401 GCAAAGGCAG TGGGTAGAT ATATCCACCC TCTAAGAGTT TGCAGGTCAT
 4451 CTATATATGA TAGCCAGAGA CACAACCTGCA GGACAGCCAG ACTCTGAGCA
 4501 CTCTCCCCAG CTCTTGTAG CTCTGTTTCA GTGGTGACTT GTGACAAGAA
 4551 TCCTGGGGAA CCTGTGCCTC ACTGTCTCTC GTCTTCTTTA ATAGAGTTTC
 4601 GCTGCCACGA GACTCTTCTC CAAGAAGTCA TGCATTGTGC ACAGAATGAA
 4651 CAAGGATGCC ATGCCCTCCC TTCAGGACCT CGATACAATG GTCAAGGAAC
 4701 AGAAGGTAAA GTCTCGCCTT CTTCCTTTGGA GTGACAGGAA GTCTTACAGT
 4751 CTCCAGTACA CAGTGAAGTC ACCCCCATTG CCTCTTTGGT GGAGCATGAC
 4801 AGCATGTTTG TCATGATAAA TGCCACAAAC ATGTAAACT GTTCAGTGTC
 4851 TGCCCTGAATG GAGGGTGGCT TCCACTGTGT CAGATGCCGT GGCCCATCATC
 4901 TGCCCTCTGCA GGGTCCAGTA AAGCACTGGC TATCTTGAGT GTCAGAGACC
 4951 CAAAGGTCTG TACACTTCAG TACAAGCCCT CCATATTCA AGGGCACACT
 5001 CCTACAGTCG TTGGGGTTAT CAGAAGTAGC AAACATAGAG ACTGGATTTT
 5051 CAGATGAAAA GAAATCCTTT TTAAGTCTA AGTATGCCTT ATACAATGTT
 5101 TGAGATATTC TCAATACTAA AAAAAAAAAA ATTGTTGCTT GCTTGAAAAA
 5151 CAAATGTAAC CAAGTGCCT ATATCCAGTG TCAATCATGG CTGTAGTAGA
 5201 TGGGAAGAGG GAGCCCGTGG TTTTCACAGT CAGACGCCTG AGTTATTCTT
 5251 CTAAGTGATA AATTGGTTCC TATAACAAGC AAGCCAGTGA ATATAAATAA
 5301 GCTCTATCTC AGAAGTTATC CTGTAGTGCT ACCCTAGAAT CTAAGAGAGC
 5351 AAAAGTGCTT CAATTTTCAG AATAAGTTTT GCTTTGGACT TCTGTTTTTC
 5401 TAAACAATAA TAACTTCAA CCATCTAAGC CTCGTGGGAC ACTTAGAAAT
 5451 ACCAAGCCAT TCAAAGCTAG AATTGTTTCT TCACCTTACT TGAAAAACAA

FIG. 4 Cont.

5501 ATGACAACCA AAAATTGTCC CCACTGCCCT TGTACATCTT CAGATCAGTA
 5551 AAGTCCTGGG CTCAGGGATC ATTCACCTTC TTTCTTTCCT TTCACACTCA
 5601 ACTTCAGGGT AAAGGGCCTG GAGGAGCTCC TCCAAGGAC TTGATGTACT
 5651 CCGTCAACCC TACCAGAGTG GAGGACCTGA ATACATTCGG ACCAAAGATT
 5701 GCTGGCATGT GCAGGGGCAT CCCTACCTAT GTGGCCGAGG AGATTCCAGG
 5751 TGTGTACCCT GAGATGCTGT ATATCCCAAT GCAGTACTGA GAGAGCCATC
 5801 AGACACTCTA AAGTGTGACC ACAGACGGAC CAATCATGTG GATTATCAGA
 5851 GCAAACACTT GCTTGCTCCT TGTGACAGAC TTGTCCATGC TTCAAAAAGTT
 5901 CATTAAAAAA AATAGTTTAC AGGCTCCTCA CAGAAACCTT AGTAGAATCC
 5951 ACAGCTTCTG CTCTTAGTCT TACTTTTTAG AAAGTGAAGC CCAGAGAAAG
 6001 GTCACAAAAC TTTTGTCTGG CTCAGGTCTT ATGTCTTTAA CTTTATAGAA
 6051 TACCGTCTTT CTGGGTGGGT GGGCTCTAGA GTAAACTTCA AGTGAGTTCA
 6101 AGGAAAGCAT GAGAAGTAGG GAAGACCAA TGAAGGAGA ATGCCAATGA
 6151 AATCTATCGA TTCTATAGCG CCAATGCTTA ACTCCTAGGC GTTCAAAGAA
 6201 TAGTATCCAC AAGGTGTCAG CCTAAGATCC TAATCTAACA GCAAGTTTTC
 6251 AGATCTCTGA AGTGAAAAGA GAAAGCAAGA GAGGAACAGA GACAGAAACA
 6301 GTAAGAGACA GAGAGGCAGA GACAAAGAGA CAGGAGGAAT AGAGAGGGAT
 6351 TAAATTAAT ATATAGTTTA GAAATTAGCA CTCCTCACAG TCCCTGCAGA
 6401 GTCCTAGGAT AGGCACTGAT TTGGACTTCT TTTCTTCTCA CTAGACCAA
 6451 ACCAGCCTTT GTACTCAAAG AAGTGCTACA CAGCTGACAT ACTCTGGATT
 6501 CTGCGGATGT CCTTCTGTGG AACATCAGTG GAGACATACT AGAAGTCACA
 6551 GGAAAACAA CCGTGGGCTC TGACCATCGC AATGCTTGAT TATGAGAGTG

FIG. 4 Cont.

6601 TTCTCTGGGG GTTGTGATTA GCTTCTTTAA GGCTCAATAA ACCCAGTGG
 6651 CAGCACATCC AGTTTGTAAT GACATGCCTC ATGACTTCTA TGGGAGTCCA
 6701 ATGTGGCACC TGCCAGCCTG TATTCAGGAC CTCTCOGCTA TAAAGCATCC
 6751 CTCCAGAGTT TTCAAATACT ACAAGCACA GCCTGGGTTT GGGCTCAGAT
 6801 AGGCCACTGC TGCCTGACTA CATTACAGAC AAACAAGTTT TAAAAGAAAG
 6851 AAAAAAGAGC TCAGAGTGGC TGGATCAGC AAGGGTGTTT TTCCTGCAAG
 6901 GAGCCAGAAG TATCAATAAT CACCAAGGA GGAGACACTG GGAATGAGAG
 6951 ACTAGAACAC ACGCCTGCAG ATACGGAGAA CCTCAGCATT GCCGCTCTCT
 7001 CCCATAACTG CACACCCCT TCTGTAACT CTGCTTCTTT CTTTCACCTG
 7051 AAGATGCCCC TTGCTTTTTT TTATTATAGG ACANGATAAC TAGACCAGAA
 7101 AGTCAACCTG ACTCTCTACA TTTATATGTC TTCCCAGNTC AAGAAATATT
 7151 ATTTACTGGT GAATGGCACT TCTATATTCC CTTGGTTCAA TAAGTCTACA
 7201 GGATCCATTG ATTGACAGGC CAAGAGTGAG ATCACATGAT ACCCAAGCAC
 7251 ATGGGTCTTT CCTTGAAGGA GAAGGATCCA

FIG. 4 Cont.

1 ATGTTGTCGTCGGGTCTGCTTGGCCTCCTTGCAGCTCCTGGTTTTCGCTTACACGGTCAAC
 61 ATCAATGGTAATGATGGCAATGTAGACGGAAGTGGACAGCATTGGTGAGCATCAATGGT
 121 GTGCACAACGTGGCCAATATCGACAACAATAACGGCTGGGACTCCTGGAATAGCCTCTGG
 181 GACTATGAAAACAGTTTCGCTGCCACGAGACTCTTCTCCAAGAAGTCATGCATTGTGCAC
 241 AGAATGAACAAGGATGCCATGCCCTCCCTTCAGGACCTCGATACAATGGTCAAGGAACAG
 301 AAGGGTAAGGGCCTGGAGGAGCTCCTCCCAAGGACTTGATGTACTCCGTCAACCCTACC
 361 AGAGTGGAGGACCTGAATACATTCGGACCAAAGATTGCTGGCATGTGCAGGGGCATCCCT
 441 ACCTATGTGGCCGAGGAGATTCCAGGACCAACCAGCCTTTGTACTCAAAGAAGTGCTAC
 501 ACAGCTGACATACTCTGGATTCTGCGGATGTCCTTTTGTGGAACATCAGTGGAGACATAC
 561 TAG

FIG. 5

1 MKLTMFVVGL LGLLAAPGFA YTVNINGNDG NVDGSGQQSV SINGVHNVAN
 51 IDNNNGWDSW NSLWDYENSF AATRLFSKKS CIVHRMNKDA MPSLQDLDTM
 101 VKEQKGKGGPG GAPPKDLMYS VNPTRVEDLN TFGPKIAGMC RGIPTYVAEE
 151 IPGPNQPLYS KKCYTADILW ILRMSFCGTS VETY

FIG. 6

1 atgcctgact tctcaactca ttgcattggt gaagccaaga tgaagttcac
 51 aattgccttt gctggacttc ttggtgtctt cctgactcct gcccttgctg
 101 actatagtat cagtgtcaac gacgacggca acagtgggtg aagtgggcag
 151 cagtcagtga gtgtcaacaa tgaacacaaac gtggccaacg ttgacaataa
 201 caatggatgg aactcctgga atgccctctg ggactataga actggctttg
 251 ctgtaaccag actcttcgag aagaagtcac gcattgtgca caaaatgaag
 301 aagggaagcca tgccctccct tcaagccctt gatgcgctgg tcaaggaaaa
 351 gaagcttcag ggtaagggcc cagggggacc acctcccaag agcctgaggt
 401 actcagtcac ccccaacaga gtcgacaacc tggacaagtt tggaaaaatcc
 451 atcgttgcca tgtgcaaggg gattccaaca tacatggctg aagagattca
 501 aggagcaaac ctgatttcgt actcagaaaa gtgcatcagt gccaatatac
 551 tctggattct taacatttcc ttctgtggag gaatagcgga gaactaa

FIG. 7

1 MKFTIAFAGL LGVFLTPALA DYSISVNDDG NSGGSGQQSV SVNNEHNVAN
51 VDNNGWNWSW NALWDYRTGF AVTRLFEKKS CIVHKMKKEA MPSLQALDAL
101 VKEKKLQGGG PGGPPPKSLR YSVNPNRVDN LDKFGKSIVA MCKGIPTYMA
151 EEIQGANLIS YSEKCISANI LWILNISFCG GIAEN

FIG. 8

1 MKETIAFAGL LGVFLTPALA DYSISVNDDG NSGGSGQQSV SVNNEHNVAN
51 VDNNGWNSW NALWDYRTGF AVTRLFEKKS CIVHKMKKEA MPQLQALDAL
101 VKEKKLQGGK PGGPPPKSLR YSVNPNRVDN LDKFGKSIVA MCKGIPTYMA
151 EEIQGANLIS YSEKCISANI LWILNISFCG GIAEN

FIG. 9

Human	1	MKFTIVFAGLLGVFLAPALANYNIDVNDNNNAGSGQQSVSVNNEHNVAN	50
Pig	1	MKFTIAFAGLLGVFLTPALADYSISVNDGNSGGSGQQSVSVNNEHNVAN	50
	51	VDNNNGWDSWNSIWDYGNNGFAATRLFQKKTICIVHKMKKEVMPISQLDAL	100
	51	VDNNNGWNSWNLWSYRTGFAVTRLFRKKSICIVHKMKKEAMPSLQALDAL	100
	101	VKEKKLQCKGPGGPPPKGLMYSVNPKNVDLSEKFGKNIANMCRGIPTYMA	150
	101	VKEKKLQCKGPGGPPPKSLRYSVNPNRVDNLDFGKSIVAMCKGIPTYMA	150
	151	EEMQEASLFFYSGTCYTTSVLWIVDISFCGDTVEN	185
	151	EEIQGANLISYSEKCSANILWILNISFCGGIAEN	185

FIG. 10

	1		50
Human	MKFTIVF.AG	LLGVFLAPAL ANYNIDVN.D	DNNNAGSGGQQ SVSVNNEHNV
Pig	MKFTIAF.AG	LLGVFLTPAL ADYSISVN.D	DGNSSGGSGQQ SVSVNNEHNV
Mouse	MKLTM.FVVG	LLGLLAAPGF A.YTVNINGN	DGNVDGSGGQQ SVSINGVHNV
	51		100
Human	ANVDNNNGWD	SWNSIWDYGN GFAATRLFEK	KTCIVHKMNK EVMPISIQSLD
Pig	ANVDNNNGWN	SWNALWDYRT GFAVTRLFEK	KSCIVHKMKK EAMPSLQALD
Mouse	ANIDNNNGWD	SWNSLWDYEN SFAATRLFSK	KSCIVHRMNK DAMPSLQDLD
	101		150
Human	ALVKEKKLQG	KGPGGPPPKG LMYSVNPVK	DDLKFKGKNI ANMCRGIPTY
Pig	ALVKEKKLQG	KGPGGPPPKS LRYSVNPNRV	DNLDKFKGSI VAMCKGIPTY
Mouse	TMVKEQK..G	KGPGGAPPKD LMYSVNPTRV	EDLNTFGPKI AGMCRGIPTY
	151		188
Human	MAEEMQEASL	FFYSGTCYTT SVLWIVDISF	CGDTVEN
Pig	MAEEIQGANL	ISYSEKCISA NILWILNISF	CGGIAEN
Mouse	VAEEIPGPNQ	FLYSKKCYTA DILWILRMSE	CGTSVETY

FIG.11

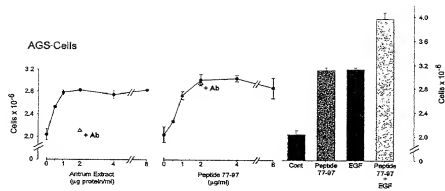


FIG. 12

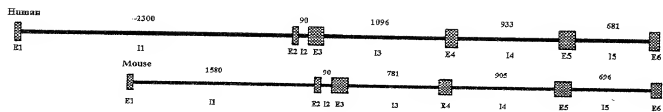


FIG. 13